Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Stealth Energy, USA Inc.
Well Name/Number: Dexter 7-2
Location: NW SW Section 7 T11N R31E
County: Musselshell **, MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time: No, 10 to 15 days drilling time.
Unusually deep drilling (high horsepower rig): No, single or double derrick drilling rig to drill to 4,200' TD vertical Heath Formation.
Possible H2S gas production: Slight.
In/near Class I air quality area: No Class I air quality area.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
__ Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____

Comments: No special concerns – using a single or double derrick drilling rig to drill to 4,200'TD Heath Formation test.

Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater, freshwater mud system.
High water table: No high water table anticipated.
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage, Gremmert Coulee, to the Musselshell River, about 1/32 of a mile to the west from this location.
Water well contamination: No, closest water well is about 1 mile to the southeast and 1 3/8 of a mile to the south from this well. Depth of theses domestic and stock water wells are 102 to 4150'. Surface hole will be drilled with freshwater and freshwater muds to 420' and steel 8 5/8" surface casing will be run and cemented to surface from 420' to protect ground water. If productive 5 ½" casing will be run and cemented above the 3rd Cat Creek. If well is P&A cement plugs will be set to cover the 3rd Cat Creek Formation.
Porous/permeable soils: No, sandy silty clay soils.
Class I stream drainage: No, Class I stream drainage in the area.

Mitigation:
___ Lined reserve pit
_X_ Adequate surface casing
___ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____

Comments: 420' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud system to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: None, only ephemeral drainages will be crossed.
High erosion potential: No, moderatel cut, up to 16.2' and small fill, up to 5.7', required.
Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, a large wellsite of 200'X240' location size required.
Damage to improvements: No, slight, surface use is prairie grassland.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be from existing county road, Mosby Road and existing two track well/ranch access trails. Will build about 2547' of new access road. Drilling fluids allowed to dry in the pits Drill cutting will be disposed of in the earthen reserve pits, after being allowed to dry. Earthen pits will be backfilled when dry. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residences none within 1 mile from this location.
Possibility of H2S: Slight
Size of rig/length of drilling time: Single or double derrick drilling rig/length of drilling time, 10 to 15 days drilling time.

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: Adequate surface casing and operational BOP equipment should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified.
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: None identified.
Threatened or endangered Species: Threatened or endangered species listed is the Black-footed Ferret. Proposed listing is the Mountain Plover. Candidate specie is the Greater Sage Grouse.

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Private surface lands. Utilizing existing roads and two track well access road for most of the access into this location. Surface is prairie grassland. Well will be drilled this fall/winter. Sage Grouse Mitigation for Oil & Gas Operations on School Trust Lands (November 2007) requires a ¼ mile buffer around active Leks and time restrictions apply. This well is more than ¼ mile from the nearest Lek and will be drilled after June 15, 2010 and before March 1, 2011. Nearest active Lek is 2 miles away based upon Fish, Wildlife and Parks review. See Fish Wildlife and Parks concerns, attached.

_____

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____

Comments: On private surface lands. No concerns.

_____
_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation

Comments: No concerns.

_____
_____

Remarks or Special Concerns for this site

Well is a 4,200' TD vertical hole to the Heath Formation.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur with the drilling of this well.

_____
_____

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the

human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki
(title:) Chief Field Inspector
Date: September 20, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Musselshell County water wells
(subject discussed)

September 2, 2010
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Musselshell County

September 2, 2010
(date)

Mr. Jay Newell, Montana FWP
(Name and Agency)
Greater Sage Grouse Leks in Musselshell County, Montana
(subject discussed)
September 8, 2010
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _ _____
Others present during inspection:_____